Pearson
BTEC

Examiners' Report
Lead Examiner Feedback

January 2022

Pearson BTEC Nationals
In Information Technology (31761H)
Unit 2 Creating Systems to Manage Information

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Grade Boundaries

What is a grade boundary?

A grade boundary is where we set the level of achievement required to obtain a certain grade for the externally assessed unit. We set grade boundaries for each grade, at Distinction, Merit and Pass.

Setting grade boundaries

When we set grade boundaries, we look at the performance of every learner who took the external assessment. When we can see the full picture of performance, our experts are then able to decide where best to place the grade boundaries – this means that they decide what the lowest possible mark is for a particular grade.

When our experts set the grade boundaries, they make sure that learners receive grades which reflect their ability. Awarding grade boundaries is conducted to ensure learners achieve the grade they deserve to achieve, irrespective of variation in the external assessment.

Variations in external assessments

Each external assessment we set asks different questions and may assess different parts of the unit content outlined in the specification. It would be unfair to learners if we set the same grade boundaries for each assessment, because then it would not take accessibility into account.

Grade boundaries for this, and all other papers, are on the website via this link:
http://qualifications.pearson.com/en/support/support-topics/results-certification/grade-boundaries.html

Awarding BTEC qualifications in 2022

Ofqual has set out their plans for awarding qualifications in 2022 and intend to return to a normal, pre-pandemic, approach to grading standards over by 2023. They have confirmed that 2022 will be a transition year, to reflect that we are in a pandemic recovery period and students' education has been disrupted.

Our guiding principle and approach to awarding BTEC qualification results in 2022 will be to ensure parity in relation to the approach being taken for GCSE and A level learners. BTEC courses have a different structure and design to academic qualifications - BTECs are modular qualifications (with assessments taking place throughout the course) compared to GCSEs and A levels which are linear (assessed and awarded at the same time at the end of the year), and therefore our approach needs to be different.

In 2022 we will return to the usual method of calculating BTEC qualification results, however adaptations including, U-TAGs and reduced internal assessment, are in place to provide a comprehensive package of support for students.

The basis of our awarding approach to BTECs this year is to ensure it is as fair as possible for all learners. We will use a range of evidence to set grade boundaries for the external units. Part of this evidence will be to closely monitor learner performance in all assessments that contribute to learners' final qualification grade, to ensure parity with A level and GCSEs.

Further information can be found on our website and via our Social Media channels.

31761H: Unit 2 Creating Systems to Manage Information

Grade	Unclassified	Level 3			
		N	P	M	D
Boundary Mark	**0**	7	14	26	38

Introduction

Please note there is a paper-based solution, marking guidance and two marked scripts available for use with this examiner's report.

The resources are available here and will be referred to throughout this report.

This unit is a mandatory synoptic unit, which requires learners to complete two set tasks to design, create, test, and evaluate a relational database system that manages information. The scenarios in this examination were based around artists and exhibitions.

This was the second assessment using the new examination structure:

- part A – normalisation, implementing the relational database structure, building queries and a report, testing, and evaluating the relational database structure
- part B – the interface i.e., two forms, testing and evaluating the interface.

In terms of administration there were several learners who did not follow the guidelines i.e., only required to submit pdf versions of the activities and the final databases for Part A and Part B. The databases are for administration purposes only and **do not** get marked.

Centres **must** use the examination templates provided with each examination paper. There are **still** several learners/centres failing to do this. The templates are designed to give learners the best opportunity to present **all** the evidence required. Learners/centres who do not use the templates tend to miss out important evidence. The templates are provided as .rtf files. Centres may choose to use Word versions of these templates. Leaners must ensure that they save the templates as pdf files – many did not this series.

In Part A, learners **must not** create any new attributes, they should use ***all, and only,*** the attributes given in the data extract. Please note using all and only the attributes given does not mean that learners cannot rename attributes. This is perfectly acceptable. In Part B, learners should not change the structure of the database at all. They should build their interface around the structure exactly as it is given.

Part A Activity 1 – Database relationship screenprint

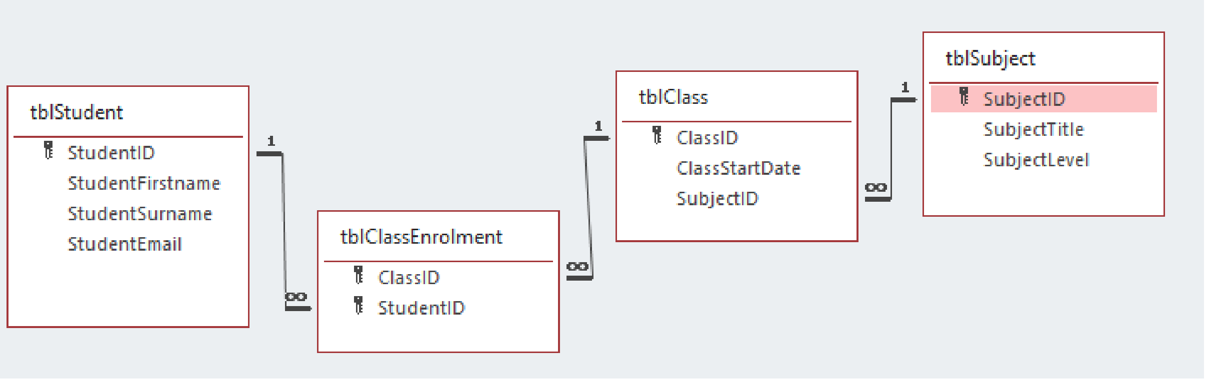
This task is designed to test the learners' knowledge and skills in terms of database modelling via creating a database skeleton structure that reflects third normal form. They should use ***all, and only***, the attributes given in the data extract.

Marking Guidance	Page 3
Script A	Page 3
Script B	Page 3

The evidence expected is the database relationships screenprint taken from the database.

The screenprint should include:

- each table in their solution
- all the fields in each table
- primary keys that have been assigned
- foreign keys (where appropriate)
- relationships between tables
- the enforcement of referential integrity



It was sad to see how many learners did not include this screenprint and that others named their database Activity 1. The database itself does not form part of the evidence that examiners consider when awarding marks. The database is there purely for admin purposes.

At times learners had obviously spent more than the time advised for this activity, producing copious screenprints showing how the tables were built, how relationships were created and lengthy annotations. This was a shame as it was clear to see it affected achievement in later activities because the learners had run out of time.

It was really pleasing to find there were very few instances of learners drawing ERDs using word processing or graphics software. However, where learners had it tended to mean the relationships were not evidenced correctly.

Whilst some learners successfully normalised the given extract, it was clear to see that many learners based their solution on the three bullet points given in the scenario without considering the data set carefully or the other pointers given in the scenario.

Where marks were not achieved it tended to be because:

1. learners did not produce the ERD using a screenprint from their actual database
2. learners used a three-table solution
3. fields were truncated in tables. Each attribute that cannot be seen or is in the wrong table is taken as an instance of data redundancy.
4. Relationships were incorrect or referential integrity was not enforced
5. links between the table were not on the correct fields

Part A Activity 2 – Table structures and validation

Learners **must** use the template provided in each examination series for this task. Examiners mark the evidence against the learners' own entity relationship screenprint (activity 1) to ensure learners are not double penalised for any errors occurring in activity 1. Where learners have not included an activity 1, their structure is marked against our solution. It is designed to test their ability to build the database tables following standard naming conventions including the good use of field names, relevant data types, assignment of primary and foreign keys and a range of suitable validation.

Marking Guidance	Pages 4 to 6
Script A	Pages 4 to 7
Script B	Pages 4 to 7

Traits 1, 2 and 3

tblStudent

Field Name	Data Type
StudentID	AutoNumber
StudentFirstname	Short Text
StudentSurname	Short Text
StudentEmail	Short Text

tblSubject

Field Name	Data Type
SubjectID	AutoNumber
SubjectTitle	Short Text
SubjectLevel	Number

tblClass

Field Name	Data Type
ClassID	AutoNumber
ClassStartDate	Date/Time
SubjectID	Number

tblClassEnrolment

Field Name	Data Type
ClassID	Number
StudentID	Number

The evidence expected is one screen print per table. These screenprints cover the first three traits.

In general it was sad to see how many learners did not include these screenprints but went straight into evidencing validation. Unfortunately many times this meant there was at least one table missing, if not more depending on what validation was shown. If the learners follow the template and do as it tells them this would not occur.

Trait 1 *Naming conventions*

Whilst many learners did use standard naming conventions and ensured the conventions used were consistent, it was surprising to see how many did not. We are expecting tables to use 'tbl' as the standard convention to identify tables and that fields will consistently use lower/upper case, spaces etc. Table names should be consistent, primary key names should be consistent, other field names should be consistent. Unfortunately, quite a few learners cropped the names of the table off meaning a judgement could not be made as to whether naming conventions had been used or not.

Trait 2 *Keys*

Most learners did manage to ensure the structure evidenced in this activity matched the structure in their activity 1. It is worthwhile advising learners that if they do make changes to the structure in this activity then they should update their screenprint in activity 1.

Trait 3 *Data types*

Many learners did use the correct data types for all fields:

- Subject level, Number
- Class start date, Date/Time
- primary keys, any suitable data type
- foreign keys match their primary (e.g., number -> AutoNumber)
- everything else text

However, where marks were not achieved it tended to be because:

- Class start date was not set as Date/Time and/or Subject level was not number
- the data types for primary and foreign keys did not match e.g., number mismatched with text etc.

Trait 4 *Validation*

Learners are to provide one screenprint of each of the types of validation listed. Learners need to **think very carefully** about the screenprints they include. The screenprints must show validation that is appropriate to the scenario and the requirements given in activity 2 and activity 4.

In this paper the evidence required was **one** each of:

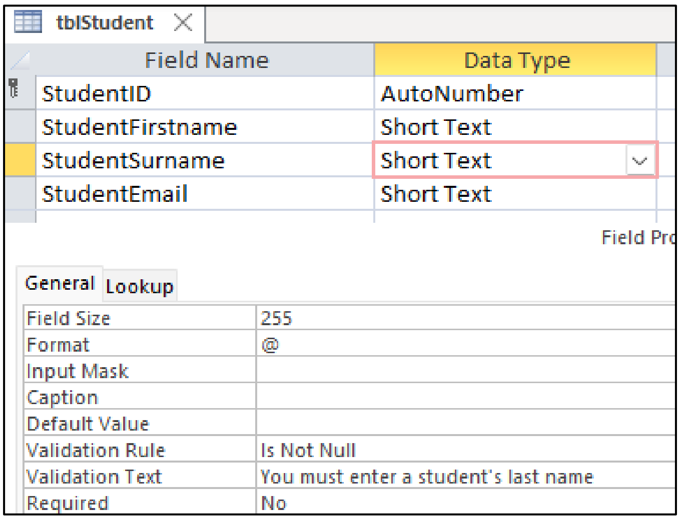
- presence check
- length check
- value lookup or range check
- table lookup
- format check

Where more than one example of each had been included, the first example was taken as the evidence to be assessed.

Learners should fully validate their database tables even though only one screenprint is required. It may be that Activity 4 requires the testing of something not specified in Activity 2 e.g., testing of more than one foreign key.

It is worth nothing that the minimum requirements for appropriate evidence of validation applied to a foreign key field is that the table name and field name can be clearly seen. Without both the examiner will class the evidence as an attempt rather than accurate. For all other fields the field name must be seen to be considered accurate.

Presence Check

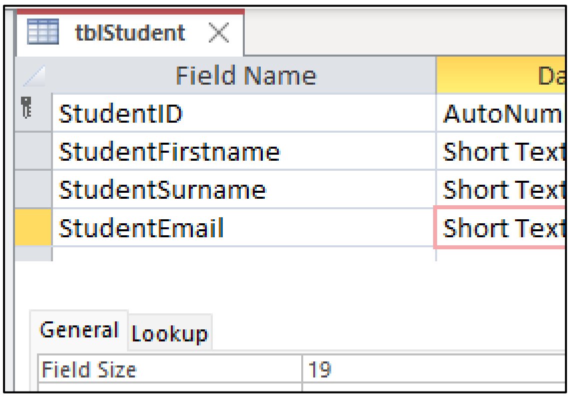


The evidence expected was one screenprint, in design view, showing the field name, presence check and suitable validation text. Learners should have noticed that a requirement of activity 2 was to ensure *'a record will not save without the student's surname being present'*, this was the steer towards the presence check required.

It should be noted that:

- presence checks applied to primary keys are not appropriate
- setting 'Required' to 'yes' is not appropriate
- showing the results of a presence check in datasheet view, rather than the actual presence check in design view is not appropriate
- a presence check on any other field was classed as a demonstration of the skill required but was not entirely correct in terms of the scenario/testing requirements

Any of the above would prevent access to the highest mark band as would not ensuring the presence check had a suitable customised error message that would appear if the field were left blank.

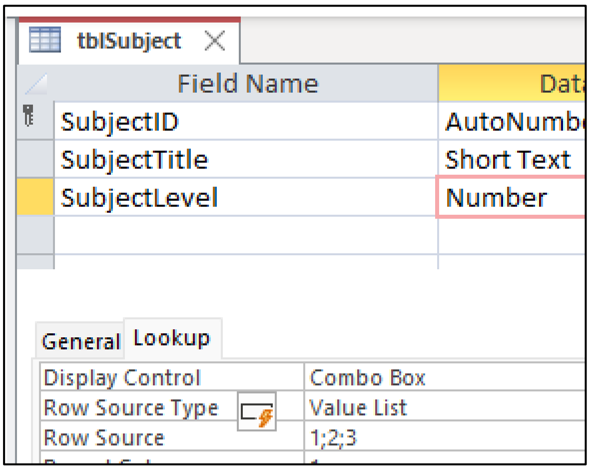


Length Check

Evidence of a suitable length check on one **text** field was expected i.e., changing the field size of a text field or using a validation rule to check that the length was appropriate.

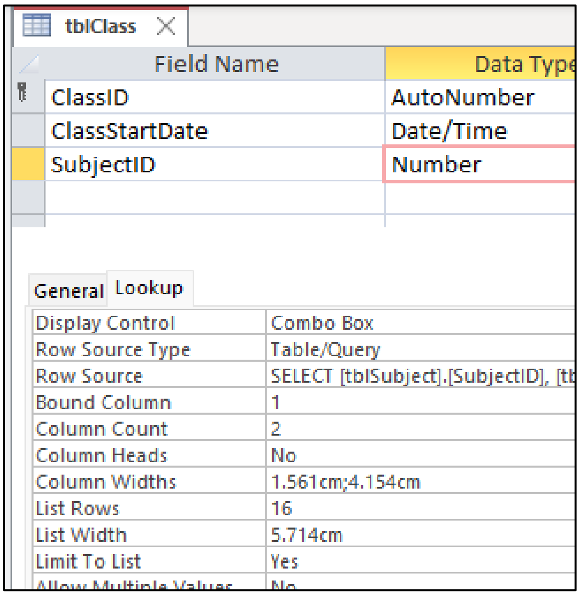
Note if the check is not applied to a text field, then it is not mark worthy.

Range Check/Value Lookup
Evidence of an appropriate range check or value lookup on the Subject level field was expected. The scenario, activity 2 requirements and and testing requirements should have guided them to this.



However, at this level learners may, or may not, realise that value lookups may not be appropriate if further records are added. For example, in this paper it was expected that there would be a table to hold the data relating to the different subjects. Some learners may have applied a value lookup to the subject title field in this table. If a new record were added it would mean that there would be a subject title so the value lookup would be ineffective. At this level, the value lookup would be acceptable though not for the highest marks.

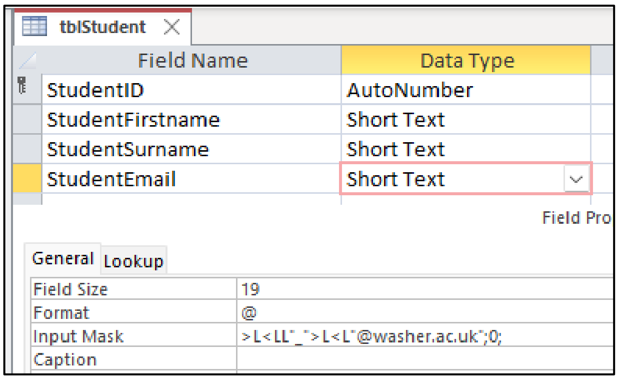
Table Lookup



The evidence required was one screenprint showing a table lookup, in design view, applied to any of the foreign keys. **NOTE**, too many learners are still not ensuring 'Limit to List' has been set to 'Yes' on their table lookup or they have cropped the screenprint so it cannot be seen. This affects the marks that can be awarded.

Many learners put forward evidence of a value lookup as evidence for this form of validation, which is not appropriate. It needs to be a lookup applied from one of their foreign keys to the relevant primary key.

Format Check



The scenario clearly pointed out the format check for this paper i.e., the email address.

Whilst format checks applied to other text fields were markworthy they were not considered as being fully appropriate.

It was sad to see that despite pointing out in every Lead Examiner report that format checks applied to numbers or dates are not acceptable evidence there are still instances of learners submitting screenprints showing this.

Part A Activity 3 – Queries and report

This task is designed to test the learners' ability to build the queries and report required to meet the specification requirements. Learners **must** use the template provided in each examination.

This activity is best suited to being assessed using a points-based approach to define the difference between 'limited', 'some', 'most' and 'all'. This is explained in the marking guidance.

Marking Guidance	Pages 7 to 9
Example Solution	Pages 6 to 9
Script A	Pages 8 to 12
Script B	Pages 8 to 11

The focus of each trait is detailed below.

Trait 1 The focus of assessment is on learners being able to recognise the tables and fields that will be required to produce the required results and adding these to their query grids/report.

Whether the learners go on to produce the required results is of no consequence in this trait. Therefore, it is worth encouraging learners who do not think they can complete some of the more challenging aspects within query b and the report to at least ensure they include evidence of the tables and fields that would be used. For example, they could achieve the top of Band 4 in this trait and lower bands for traits 2 and 3. Achievement in this trait would have a positive impact on the weaker traits – increasing the marks awarded.

Trait 2 The focus of assessment is on learners being able to use criteria and calculations correctly (including sorting). It was expected that most learners would be able to successfully add the criteria and sort in query A. This would have meant achievement at the bottom of band 2 for this trait.

It was then expected that pass level learners could achieve some of the simpler aspects of query B e.g., the count to determine the number of students enrolled into each class, merit to calculate the number of spaces left and distinction to recognise the need for an If statement and use it accordingly.

Trait 3 The focus of assessment is on learners being able to present the results of their queries and report sensibly so that the output matches the requirements and would make it easy for a user to read and understand the data.

This includes being able to:

- only show the fields requested
- ensure data/labels are not truncated
- use suitable field names/labels for generated fields
- include a suitable title on the report
- ensure the report fits on one page and uses the width of the page/size of fields/labels etc. wisely
- use a group header/footer to show items only once when appropriate.

It is worth noting that assessing truncation/layout/currency can only be determined from datasheet view of the queries and the pdf version of the database report. A screenprint of the database report is not enough.

As with trait 1, the results of the calculations do not have to be correct for achievement in this trait. Therefore, learners should be encouraged, to spend time making sure they have considered the presentation of their results.

Overall, this activity discriminated well between the different abilities of the learners with most being able to successfully complete query a, many partially completing query b, some query b or the report and a number all three.

It was clear to see that some centres had spent time encouraging learners to attempt all three even if they could not manage all aspects. These learners tended to do well in terms of marks even if some of the criteria and calculations were not correct/working. As previously mentioned, achievement in traits 1 and 3 can boost the marks for those that are weaker in the more technical aspects.

However, it was sad to see several learners did not achieve some of the marks because they did not ensure:

- all their field/label names, criteria etc. could be seen in both design and datasheet/print preview
- they created appropriate field/label names for the generated values in the queries/report
- they paid attention to the presentation of their results.

Part A Activity 4 – Structure testing

This task is designed to test the learners' ability to test the structure of their database by carrying out **only** the tests given.

Learners **must** use the template provided in each examination and should only carry out the tests specified.

Marking Guidance	Page 10
Example Solution	Pages 10 to 12
Script A	Pages 13 to 17
Script B	Pages 12 to 16

Fewer learners still do not appear to understand the evidence required in terms of testing. However, it is still clear that some learners do not consider the real world in that in many instances the person who develops the test plan is not actually the person who completes the testing. Therefore, it is worth reiterating that the template should be completed with this in mind.

Testing required in the examination:

Test to be carried out	What is it testing?
1 a record will not save without student's surname present	Presence check test
2 a record will not save if the student's email is not in the correct format	Format check test
3 a record will not save if the subject level is below the accepted range	Value lookup/range test
4 a record will not save if the subject level is above the accepted range	Value lookup/range test
5 a record will not save if the subject being taught in a class is invalid	Table lookup (foreign key) test
6 a record will not save if the student being enrolled into a class is invalid	Table lookup (foreign key) test

It was sad to see the number of learners who carried out more testing than was required. The number of tests given reflect the time allocated to complete the activity. Please encourage learners not to waste time testing anything that is not asked for. For example, test number 4 the only test that needs to be carried out is to prove a record will not if the subject level is below the accepted range. Testing to make sure characters are not required etc. is not asked for and does not attract any marks. There were several learners who had tests 1(a), 1(b), 2(a), 2(b) etc. This is not required. There should only be a retest or explanation if an error has been found and possibly corrected.

Test data column

It is expected that learners will provide the test data for a **full** record i.e., the name of each field and the data that will be used. Null, blank etc. can be used

to signify fields where no data will be used. It was very nice to see the number of learners who provided all the necessary detail in this column. However, some learners:

- use this column to tell the examiner what the test is – we do not need to know that it is already in the exam paper
- only indicate a single item of test data e.g., blank. This is of no use to a tester
- only indicate the field that will be tested e.g., ArtistSurname. This is of no use to a tester
- put a screenprint in of the table showing the data. This is not acceptable.

Expected results column

This should be specific and, indeed, many learners ensured it was. Specific means a tester would know exactly what should happen e.g., *an error message will be displayed telling the user they must enter the artist's surname*. There are some learners who still do not appear to understand this e.g.,

- an error message will be displayed
- the data will not be accepted
- I have added a combo box.

Actual results column

Many learners evidenced this well. However, some learners weaken their evidence because

- the actual results do not use the test data they said they were going to use or there was no test data to compare to in the first place
- the screenprints cannot be read
- messages cover the test data so it cannot be seen

In terms of screenprints, learners can change the width of the columns in the template and can delete the final column if they have no errors to discuss. They can also place the screen prints underneath the table so long as they ensure they clearly label which test number the screenprint(s) belongs to.

Error column

Learners should only complete this column if they have found errors during testing. Learners are not penalised for having a 'perfect' solution, however, where it is clear the actual results are not what should be expected or where they could have been better, they should be identifying this. If they have not encountered any errors and would prefer to delete this column to increase the size of the screenprints for the actual results, then this is acceptable. Learners should always check their pdf document to ensure all tests can be seen. In some cases, the pdfs had been saved in portrait orientation meaning a lot of evidence was lost.

Part A Activity 5 – Structure evaluation

This task is designed to test the learners' ability to evaluate the structure of their database.

Marking Guidance	Page 11
Script A	Pages 18 to 19
Script B	Page 17

The evaluation in Part A is distinctly different from the evaluation in Part B. Part A is designed for learners to showcase their knowledge and understanding about normalisation, minimising data duplication and how this can help ensure requirements are met. Part B is all about the interface and the usability of it from the user's point of view. It is clear to see some learners do not understand this.

Some learners also do not appear to understand that the evaluation is based upon 'minimising data duplication' as well as meeting requirements.

- Some paid lip service to minimising data duplication, some did not consider it all.
- Some regurgitated all they knew about normalisation without relating it to their solution.
- Others concentrated solely on meeting the given requirements.
- Others gave a running commentary of what they had done to complete all the activities in part A.
- Others took this as an opportunity to talk about how they were taught/how hard tasks were/how they had performed etc.

We expect a discussion of how **their** structure has minimised data duplication. The discussion should demonstrate their knowledge and understanding of the process of normalisation in terms of the **data extract** and the **given requirements** and **why their structure is suitable**. It should not be taken as an opportunity to regurgitate theory learned about normalisation etc. There is no requirement to think about the user in this evaluation. That is part B.

Part B Activity 6 – Interface and functionality

This task is designed to test the learners' ability create and automate two forms. The first requires validation and a customised, automated save process, the second may require calculations/criteria/filtering etc. and some form of an automated process.

Learners **must** use the template provided in each examination.

Marking Guidance	Pages 12 to 14
Example Solution	Pages 14 to 16
Script A	Pages 20 to 26
Script B	Pages 18 to 22

Trait 1 Assessment of this trait focusses on the presentation of the forms and how 'fit for purpose' they are in terms of what the learners have been told the forms will be used for and what they must do. Across the two forms examiners will be looking for:

- whether they match the given purpose
- sensible titles
- instructions telling the user how to use the forms
- asterisks where data entry is required
- field widths that are appropriate for data they will hold
- a good layout
- a consistent house style
- fields that have content that **should** be automatically generated are disabled
- relevant, consistent, easy to read labels (e.g., spaces)
- combo boxes (or equivalent) where relevant to make it easier for the user to input data

Whether the forms include automated routines or not is of no consequence in this trait.

Trait 2 Assessment of this trait focusses on the addition of any criteria/calculations required to meet requirements. What the form looks like and whether the automation of the form works is of no consequence in this trait.

Trait 3 Assessment of this trait focusses on the validation and automated routines that should be present to meet requirements. Validation must be at form level and not applied to any of the tables – the structure of the tables must not be altered in any way. What the form looks like is of no consequence in this trait.

Trait 4 Assessment of this trait can be determined by how well the learners has met the requirements of the other three traits as

they all play their part in the functionality of the forms and how well they meet the requirements criteria. The band awarded for this trait was automatically calculated.

Form1 – Add subject
The purpose of this form was to *add a new subject*.

This form was the simpler of the two and it was expected that this form could be created, customised, and automated by all learners with pass and above ability.

Trait 1
It was good to see some centres have taken past Lead Examiner reports and resources including sample scripts etc. into account and had prepared their learners well in terms of the requirements for this trait. It was also nice to see the many different house styles that learners used for this form and how well they took usability etc. into account.

However, it was very disappointing to see the number of learners who still cannot produce anything other than a default form. It is relatively easy for learners to achieve band 4 in this trait, which can really help boost marks awarded for those who find the calculations, criteria, and automation more difficult.

Common problems found:

- irrelevant titles e.g., the name of the table
- no consideration of the readability of the labels e.g., no spaces in labels that included more than one word
- little/no consideration of the data that would be input i.e., fields that were too wide/too deep
- no consideration of user aids including disabled fields, asterisks, instruction on how to use, drop down boxes etc.
- no save button
- SubjectID missing from the form

Trait 2
This form was the simpler of the two in terms of calculations/criteria. The only calculation required was to ensure the SubjectID would be incremented. The data type for ArtID in tblArt was AutoNumber so this did not require learners to use an actual calculation.

If the SubjectID appeared on a **bound** form and there was a save button then this was enough evidence. If DMax was used on the SubjectID field on an **unbound** form, then this was enough evidence for incrementing the ID. However, it would not have been suitable to try to save this value in the automation process for trait 3 – the data type was AutoNumber. We did expect to see the SubjectID on the form as this was taken to mean learners had taken the fact that the SubjectID would need to be generated considered.

Most learners achieved this.
Trait 3
The first form (subject form) was the form that required validation as part of/along with an automated save process. In this examination validation had

to ensure:

- the subject title was present
- the artist's initial was in the correct format
- The subject level was in the specified range
- a suitable error message would appear where invalid data had been used

Automation should have been present to:
- ensure the form was ready for data entry
- append valid data to the subject table and display a save message.

Higher ability learners should also have considered that the save process should clear the form ready for the next new subject once the save had taken place.

It was good to see many of the learners successfully validated and automated this form. Surprisingly, despite Lead Examiner reports, example scripts etc. from past papers, many learners still do not ensure they include the relevant evidence. It is very unlikely that learners can provide enough evidence using a single screenprint. It is worth nothing that a presence check applied to the properties of the field on the form itself is not acceptable as evidence of a presence check though the range check could have been evidenced using this method.

Common problems found:

- the SubjectID was missing from the form or there was no save button
- no evidence had been included in terms of how the save process worked
- the presence check was applied to the field properties of the student's surname as opposed to the macro or code
- the range was incorrect
- there were no suitable error messages
- the save took place regardless of whether there were errors or not (outside of the if statement(s))
- no append query in design view (if this was the method used).

Form 2 – Test results form
The purpose of this form was to be able to select a subject for the most recent test week, see the maximum mark available for that test, input the number of students who sat the test, input the highest and the lowest marks achieved, see the highest and lowest marks represented as percentages.

As usual, some aspects of this form were more challenging when compared to the first form to discriminate between the different abilities.

It was expected that most learners would be able to build the form, even if they could not manage to get it fully functional. It was expected that the higher ability learners would be able to produce some of the more challenging aspects and the highest ability to produce all the aspects.

It was disappointing to see that several learners did not attempt this form at all – it is worth building the form even if it does not function correctly as marks can still be obtained.

Trait 1
In terms of trait 1 and how the form should look, the requirements given in the activity were clear:

- there must be a combo box for the subject. This must contain only the subjects that have a test in the test week displayed on the form.
- Once the user has selected a subject the form must display the maximum mark for that subject's test in a field.
- The user must then be able to input into fields:
    - the number of students who took the test
    - the highest mark achieved
    - the lowest mark achieved.
- These details should then be calculated and displayed in fields:
    - the highest mark as a percentage
    - the lowest mark as a percentage

This should have led to the form including:

- a field to display the latest test week
- a combo box to select the subject
- a field to display the maximum mark available for the test selected
- fields to input the number of students who took the test, the highest mark achieved, the lowest mark achieved
- fields to display the highest mark achieved and the lowest mark achieved as percentages
- the usual – title, clear labels, asterisks, instructions etc.

Even if learners could not go on to complete any of the functionality they would still have been credited for 'fitness for purpose' and presentation. Clearly, this would have helped to boost marks.

Across the learners who attempted this form it was disappointing to see that not very many appeared to spend time thinking about how fit for purpose the interface would be or consider its presentation. Some learners had included a very good interface for the first form but did not carry that through into this form. At times, this did affect the marks awarded.

As with the first form, common problems were:

- irrelevant titles
- no consideration of the readability of the labels e.g., no spaces in labels that included more than one word
- little/no consideration of the data that would be input i.e., fields that were too wide/too deep
- no consideration of user aids including disabled fields, asterisks, instruction on how to use, drop down boxes etc.

Trait 2
In terms of criteria and calculations it was expected that:

- DMax or equivalent would be used to find the latest test week.
- A query or equivalent would be used as the source of the subject combo box with criteria added to link the test week to the test week on the form
- DLookup or equivalent would be used to display the maximum mark for the selected test
- Calculations would be added to convert the highest and lowest marks achieved into percentages

It was expected that there would be something for everybody to attempt and achieve in this trait and it did prove to be good differentiator in terms of abilities. The most common aspects successfully completed were calculating the highest and lowest marks achieved as percentages. Even if they were not entirely correct credit was given for a good attempt. Displaying the maximum mark for the subject selected was also quite successful. Finding the latest test week was not seen as often with filtering to the selected subject the least seen. Overall, there was a wide range of evidence seen that covered some, majority, and all the requirements.

The common problems encountered included:

- not including the query/queries in design view or truncating the evidence
- truncating the formulae added to the fields in the form

Trait 3
In terms of automation this is what was expected:

- The date of the latest test would display on the from
- After a subject was selected, the form would update to the maximum mark available for that test
- After the highest mark and lowest mark achieved were input, they would be displayed as percentages.

Where learners had attempted the form and the generation of data (even if it did not work correctly), they were able to gain marks in this trait.

Part B Task 7 – Interface and functionality testing

This task is designed to test the learners' ability to test the interface and functionality of the database by carrying out **only** the tests given. Learners **must** use the template provided in each examination and should only carry out the tests specified.

Marking Guidance	Page 15
Example Solution	Pages 17 to 20
Script A	Pages 27 to 32
Script B	Pages 23 to 27

The general comments discussed in activity 4 also apply to this activity.

Testing required in the examination:

1. the subject form is ready for data entry when the form opens
2. an invalid faculty cannot be selected for a subject
3. a record will save in the subject table if all the required data is present and valid
4. when the test result form opens the date of the latest test week must display automatically in a field
5. once the user has selected a subject the form must display the maximum mark for that subject's test in a field
6. once the user inputs the highest and lowest marks achieved these details should then be calculated and displayed in fields:
    - the highest mark as a percentage
    - the lowest mark as a percentage.

Again, it was nice to see most learners ensured they carried out **only** the given testing, though some are still wasting time including other tests.

The general comments given in activity 4 in terms of evidence also apply here.

Part B Task 8 – Interface and functionality evaluation

This task is designed to test the learners' ability to evaluate their interface and its functionality in terms of the quality, performance, and usability of the interface.

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Script A	Page 33
Script B	Page 28

The evaluation in Part B is distinctly different from the evaluation in Part A. Part A is designed for learners to showcase their knowledge and understanding about normalisation, minimising data duplication and how this can help ensure requirements are met. Part B is all about the interface and the usability of it from the **user's point of view**. It is clear to see some learners do not understand this.

At times learners use the evaluation as an opportunity to describe what they have done with no thought or mention of the user at all. We want to know what they have done and how/this makes the solution easier for the user to use. It is also very common to see learners ignore issues in terms of their solutions.

Summary

Based on their performance in this paper, learners should:

- ensure the structure in their activity 2 **exactly** matches the structure shown in their activity 1
- ensure screenprints can be clearly read – no truncation etc.
- ensure enough detail has been included to show the criteria/calculations and automation of the forms
- ensure there is test data present for each field in the table/form, ensure expected test results are specific, ensure the data used can be clearly in the actual test results
- ensure they understand the difference in the focus in terms of the evaluation in Part A and the evaluation in Part B

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